

## **ABSTRACT OF THE DISCLOSURE**

A communications node for an optical network is disclosed. The node includes a tunable wavelength receiver for receiving optical data from source nodes at a plurality of source wavelengths and a tunable wavelength transmitter for transmitting optical data to destination nodes at a plurality of destination wavelengths. The node also includes a media access controller which creates at least one reservation map for reserving time slots and wavelengths for transmitting data to and receiving data from a plurality of nodes, made up of the source nodes and destination nodes, based upon available time slots and wavelengths in the optical network, the reservation map being based upon demand data or other data from the plurality of nodes.